

What is claimed is:

1. In a VCT system having a phaser for adjusting an angular relationship between a crank angle of the crank shaft and a cam angle of a cam shaft, the system further has a controller adapted to determine the angular relationship based on equally spaced teeth distributed upon the circumference of at least one tooth wheel coupled to either the crank shaft or the cam shaft, a method comprising the steps of:
 - 6 a) providing a tooth wheel having a physically non-symmetrical tooth distribution on the circumference of the wheel; and
 - 7 b) adjusting the physically non-symmetrical tooth distribution into a symmetrical tooth distribution for further processing by the controller.
- 1 2. In a VCT device having a phaser for adjusting an angular relationship between a crank angle of the crank shaft and a cam angle of a cam shaft, the system further has a controller adapted to determine the angular relationship based on equally spaced teeth distributed upon the circumference of the crank shaft and the cam shaft respectively, a method comprising the steps of:
 - 6 providing a crank tooth wheel having known tooth distribution;
 - 7 providing a cam tooth wheel having known tooth distribution; and
 - 8 using the controller for adjusting values known to the controller as needed.
- 1 3. The device of claim 2, wherein the using step comprises running a cam pulse interrupt subroutine for determining a first set of adjusted values.
- 1 4. The device of claim 2, wherein the using step comprises running a crank pulse interrupt subroutine for determining a second set of adjusted values.
- 1 5. The device of claim 2, wherein the crank tooth wheel having known tooth distribution comprises symmetric tooth distribution.
- 1 6. The device of claim 2, wherein the crank tooth wheel having known tooth distribution comprises non-symmetric tooth distribution.

- 1 7. The device of claim 2, wherein the cam tooth wheel having known tooth distribution
- 2 comprises symmetric tooth distribution.

- 1 8. The device of claim 2, wherein the cam tooth wheel having known tooth distribution
- 2 comprises non-symmetric tooth distribution.